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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/743,621	04/09/2001	Peter Ho	C1043/7030	6126

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EXAMINER

MICHL, PAUL R

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 02/14/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

Applicant(s)

Examiner

Group Art Unit

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- ☐ Responsive to communication(s) filed on \_\_\_\_\_
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

### Disposition of Claims

- ☒ Claim(s) 1-37 is/are pending in the application.
- ☐ Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-37 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

### Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☒ All ☐ Some\* ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

### Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Claims 1-37 are rejected under 35 U.S.C. § 112 second paragraph for failure to particularly point out and distinctly claim what applicants consider the invention to be. Applicants' claims recite "nanoparticles". The claims do not recite the chemical composition of the nanoparticles. The chemical composition of the nanoparticles is critical and must be recited in all of the claims. Claim 1 is directed to a method comprising dissolving nanoparticles in solvent to remove the other material. Applicants' claimed nanoparticles encompass common table sugar and salt. Claim 1 encompasses a method of dissolving nanoparticles of sugar or salt having a minute impurity in water and then separating the insoluble minute impurity. Applicants do not consider common table sugar or salt to be the invention as the nanoparticles. The composition claims 24-34 and 37 also fail to particularly point out and distinctly claim the invention. Claim 24 is directed to a solution of nanoparticles. However, in solution the nanoparticles are no longer present as particles because they have been dissolved in the solvent to form the solution. It is inconsistent to recite a solution of particles. Claim 24 is broad enough to encompass a solution of common table sugar or salt dissolved in water. Applicants do not consider a solution of sugar or salt in water to be the invention. In claims 36 and 37 the phrases "substantially as herein described

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with reference to the accompanying drawings" and the phrase "substantially as herein described" are indefinite.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Suzor. As stated in the previous paragraph, applicants' claims encompass a method of dissolving nanoparticles of sugar in water and removing impurities. Suzor discloses a process for the purification of a sugar solution comprising separating non-sugar particles from the sugar solution. It would be obvious to one of ordinary skill in the art to conduct the Suzor process by dissolving nanoparticles of sugar in water and then separating impurities.

Claims 1-37 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Schroder or Fessi or Wunderlich or Wong or Spenleuhauer or Subramaniam or Maidra. All of these references disclose dissolving or dispersing nanoparticles in solvent. See the Abstract and claim 1 of each of these references. The

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difference between applicants' claims and the references is the recitation of "removal the said other material". It would be obvious to one of ordinary skill in the art to remove impurities from the solutions of nanoparticles in Schroder or Fessi or Wunderlich or Wong or Spenleuhauer or Subramaniam or Maidra. The motivation is that removal of undissolved impurities from a solution is conventional by common techniques such as filtering.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Michl whose telephone number is (703) 308-2451. The examiner can normally be reached on Monday through Friday from 7:30 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for this Group is (703) 305-5433.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2351.

PRMichl:cdc  
February 11, 2002

  
**PAUL R. MICHL**  
**PATENT EXAMINER**  
**ART UNIT 156**